

according to the location of the station. In the Gulf States it has varied from 37° to 62°, and at Key West was 27°. For Minnesota, ranges from 44° to 60° are reported. At San Francisco the range was 23°.

(2.) *Unusually low temperatures.*—Temperatures of —35° or less have been reported as follows:—SIGNAL SERVICE STATIONS: Mt. Washington, 35°; Pembina, 41°, 39°, 44°, 40°, 35°; Duluth, 35°. CANADIAN STATIONS: Fort Garry, 36°, 35°, 38°, 35°, 36°, 36°, 37°, 35°, on as many different days. VOLUNTEER OBSERVERS: Oxford, Me., 34; Traverse City, Mich., 37; Hutchinson, Minn., 36; Woodstock, Vt., 30; Wien, Wis., 42; Embarrass, Wis., 48, mercury froze on the 9th and 12th; Beloit, Wis., 36.

PRECIPITATION.

The distribution of rain-fall (or melted snow) is given on Chart No. III as closely as possible, considering the unequal distribution and the limited number of returns, there being but about 500 rain-gauges to an area east of the Rocky Mountains of 20° in latitude by 40° in longitude. The precipitation has, of course, throughout the States north of the 35th parallel, taken the form of snow, and as many volunteer observers give the depth of the snow in inches without melting and measuring to ascertain the corresponding amount of water, it has been necessary in some cases to convert the recorded snowfall into water by multiplying by an empirical factor, for which one-tenth has been generally adopted in this country.

(1) *Depth of Snow.*—The total depth of snow fallen during the month, as recorded mostly by volunteer observers, is as follows in inches: Me., 6 to 18; N. H., 6 to 15; Vt., 13 to 15; Mass., 4 to 31; Conn., 8; N. Y., 3 to 42; N. J., 5 to 8; Penn., 5 to 30; Md., 3 to 13; Va., 1 to 11; Ohio, 2 to 15; Ky., 2 to 5; Tenn., 3; Ind., 2 to 16; Mich., 11 to 50; Ill., 6 to 13; Wis., 6 to 32; Mo., 3 to 9; Iowa, 5 to 18; Minn., 7 to 16; Kan., 1 to 9; Neb., 4 to 20.

(2) *Special Rains.*—The excess of rainfall in Tennessee, as shown on Map No. III, is due especially to the heavy rain attending storm No. XII, which prevailed during the 23d, 24th and 25th, in consequence of which a severe flood prevailed in the Holston river and the upper portions of the Cumberland and Tennessee rivers.

(3) *Draughts.*—In consequence of the deficient rainfall in the northern portion of the country throughout the preceding six months and the deeply-frozen ground, reports of failing wells or general deficiency of water have been received from Missouri, New Hampshire, New Jersey, New York, Pennsylvania and Connecticut. From similar causes the rivers have been somewhat lower than usual.

(4) *Rainy Days.*—The average number of days on which some rain or snow fell has been as follows, according to the locations: New England, from 5 to 15; Middle States, 4 to 12; South Atlantic States, 6 to 10; Eastern Gulf States, Ohio valley and Tenn., 9 to 12; Southwest, except 2 in western Texas, 9 to 14; southern shore of Lake Erie, 13 to 17; southern shore of Lake Ontario, 17 to 23; Mich., 11 to 22; Wis., 9 to 13; Iowa, 4 to 12; Minn., 2 to 12; Neb., 1 to 16; Kan., 1 to 10.

HUMIDITY.

The average relative humidity for the month, as reported from the Signal Service stations only, has been very uniform, and varies from 65 to 75, except at a few localities on the Lower Lakes, the Texas coast and the extreme Northwest, where averages of 80 or 85 are reported. Owing to the very low temperature that has prevailed in the latter section the observations are somewhat uncertain.